CMSY-199
Introduction to Java
Fall 2010
Course Syllabus

Instructor: Michael L. Miller
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Meeting Room: DH-323
Meeting Time: M: 6:00 - 10:00 PM

Course Description: This course provides an introduction to the Java programming language and application programming interface (API). Topics include input/output, data types, operators, control statements, methods, arrays, classes, objects, interfaces, and exception handling. The Swing toolkit will be used to create graphical user interfaces for applications and applets. Object-oriented programming and design principles will be emphasized including a case study with the Unified Modeling Language (UML). Students will complete several programming assignments in order to gain practical experience and master the concepts presented in the classroom. (3 Credits)

Prerequisite: CMSY-141 or CMSY-181 or CMSY-190.

Textbook: Java How To Program, 8th Edition, by Paul Deitel and Harvey Deitel

Materials: USB Flash Drive

Teaching Methods: Classroom lectures, demonstrations, and student lab time.

Classroom Atmosphere: No eating or drinking in the classroom. Please silence your cell phone.

Grades: The course is based on a point system.
Programming Assignments - 100 pts. each
Tests - 200 pts. each

Your final grade will be computed by the formula:
Grade = ((Total Points Earned) / (Total Points Possible)) * 100%

Letter grades will be assigned as follow:
A = 90 - 100% B = 80 - 89% C = 70 - 79% D = 60 - 69% F = Below 59%

Turning in Assignments: Assignments will be submitted electronically using the CE6 course website prior to the start of class on the due date. A printed copy of the source code and sample output will also be submitted at the beginning of class on the due date.

Late Assignments: There will be a 10 point deduction - *per day* - for late assignments and they will only be accepted within 3 days of the original due date. You must submit the printed copy to the division office (DH 239) on the *same day* you submit the electronic copy using the CE6 course website. Do not make changes to the printed copy after you submit the electronic copy.

Make-up Tests: Make up tests are given only when verifiable emergencies prevent you from being in class on test day. You must contact me as soon as possible and no later than before the next class meeting after the test day to schedule a make-up.

Attendance: Class attendance is required. If you miss a class, you are responsible for the material that was covered (including any assignments/tests) on that day.

Upon completion of this course, the student will be able to:

1. Write Java programs using a text editor.
2. Use the javac command to compile Java programs.
3. Use the java command to run Java programs.
4. Develop programs that include console and file I/O using classes from the java.io package.
5. Develop programs that declare, initialize, and use primitives, arrays, and objects.
6. Use operators to create expressions for control statements that affect program flow.
7. Implement methods including modifiers, return type, argument passing, overriding, and overloading.
8. Develop programs that use the ArrayList class from the Java Collections Framework.
9. Develop programs that use the String and StringBuilder classes.
10. Develop code that uses exceptions and exception handling.
11. Create graphical user interfaces (GUI) for applications and applets using the Swing toolkit.
12. Incorporate object-oriented programming (OOP) and object-oriented design (OOD) principles when developing programs.

Academic honesty, as defined in the student handbook, is required of all students.

Please review HCC's Academic Standards Policy in the student handbook.

Schedule:
Below is a tentative schedule that is subject to change. Note that the first class meeting will be September 13.

Date	Class Activity	Topic
Aug. 30	Ch. 1, Ch.2.1-2.2; Assigment 1	Introductory Material
Sept. 6	Labor Day	
Sept. 13	Ch. 2, Ch. 3	Java Applications
Sept. 20	Ch.4, Ch. 5	Control Statements
Sept. 27	Ch. 6	Methods
Oct. 4	Ch. 7	Arrays and ArrayLists
Oct. 11	Ch. 16	Strings
Oct. 18	Ch. 8	Classes and Objects
Oct. 25	Ch.9	OOP: Inheritance
Nov. 1	Ch. 10	OOP: Polymorphism
Nov. 8	Ch. 11	Exception Handling
Nov. 15	Ch. 17	File I/O
Nov. 22	Ch. 14, Ch. 23	Swing, Applets
Nov. 29	Ch. 12	OOD: UML
Dec. 6	Ch. 13	OOD: Implementation
Dec. 13	Final Exam	

Division Outcomes: The following outcomes are instilled in various courses throughout each associate degree program in the Business and Computer Systems Division. By completion of a program, each graduate of the Division is expected to have achieved these outcomes. They serve as the basis for transfer to a baccalaureate program and functioning in a business career.

1. Engage in an actual business setting (real-time, real-life experience) in order to develop a practical understanding of how to function within that setting.
2. Communicate effectively and deliver professional oral and written presentation(s) in various business settings.
3. Operate in an ethical, professional manner consistent with the career field.
4. Function in an up-to-date technological environment, consistent with the chosen career field.
5. Demonstrate understanding of financial foundations of business operations.
6. Demonstrate the ability to think critically (problem-solve, be creative, make decisions).
7. Function as a team member and leader in a cooperative and goal-directed manner.
8. Use accepted data-gathering and analysis techniques.
9. Incorporate awareness of global impacts on commerce and business.
10. Demonstrate an openness to change and be able to function in an environment of change.